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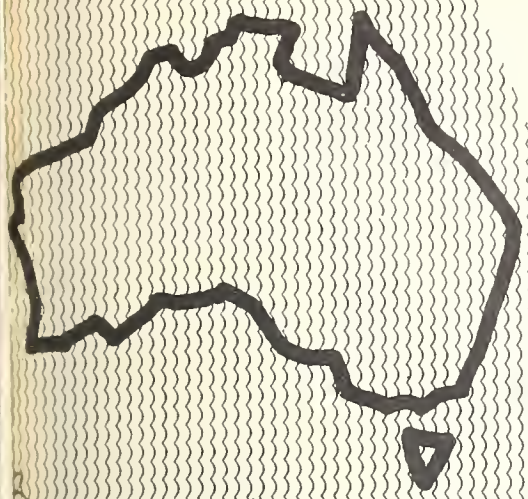
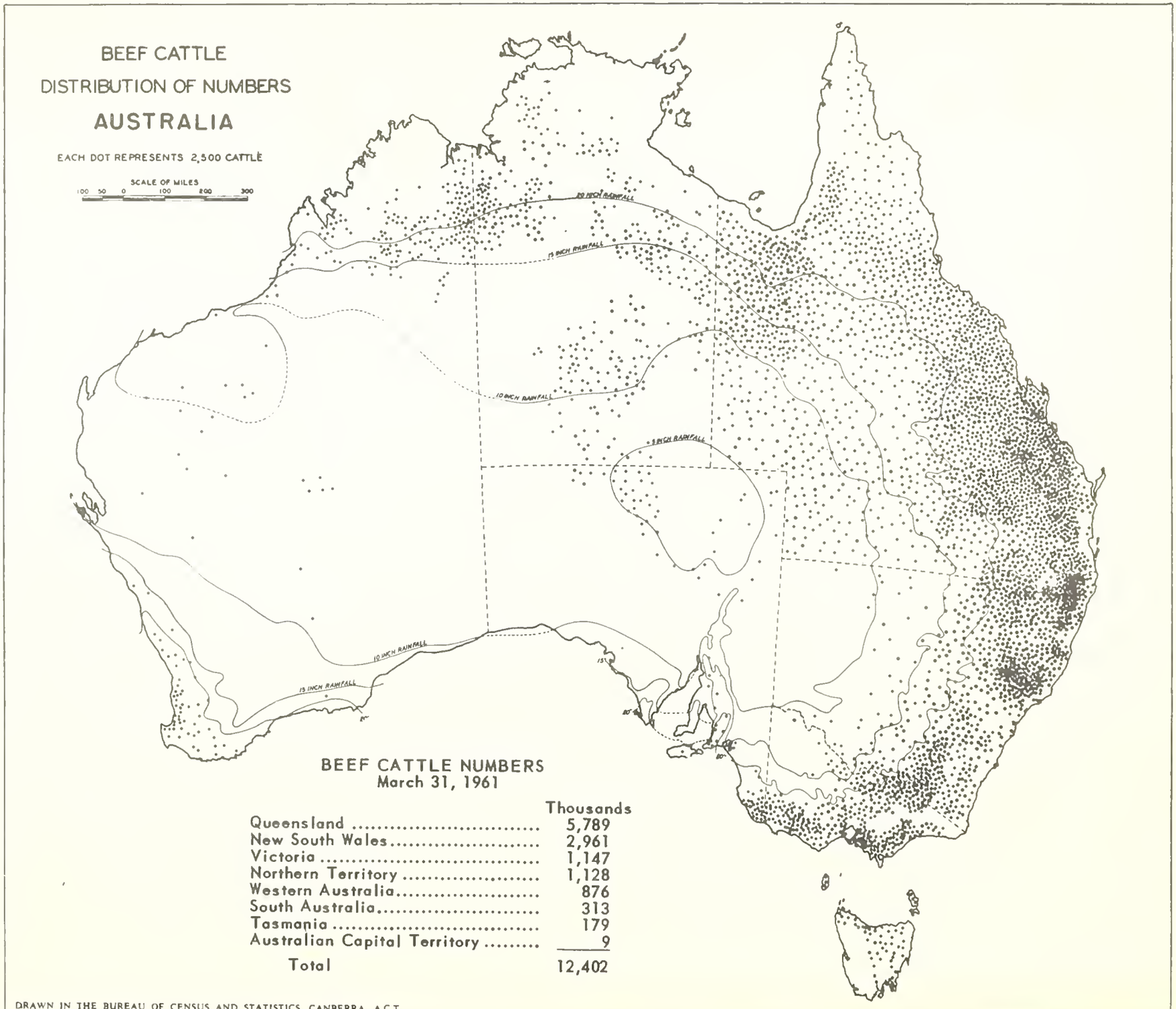
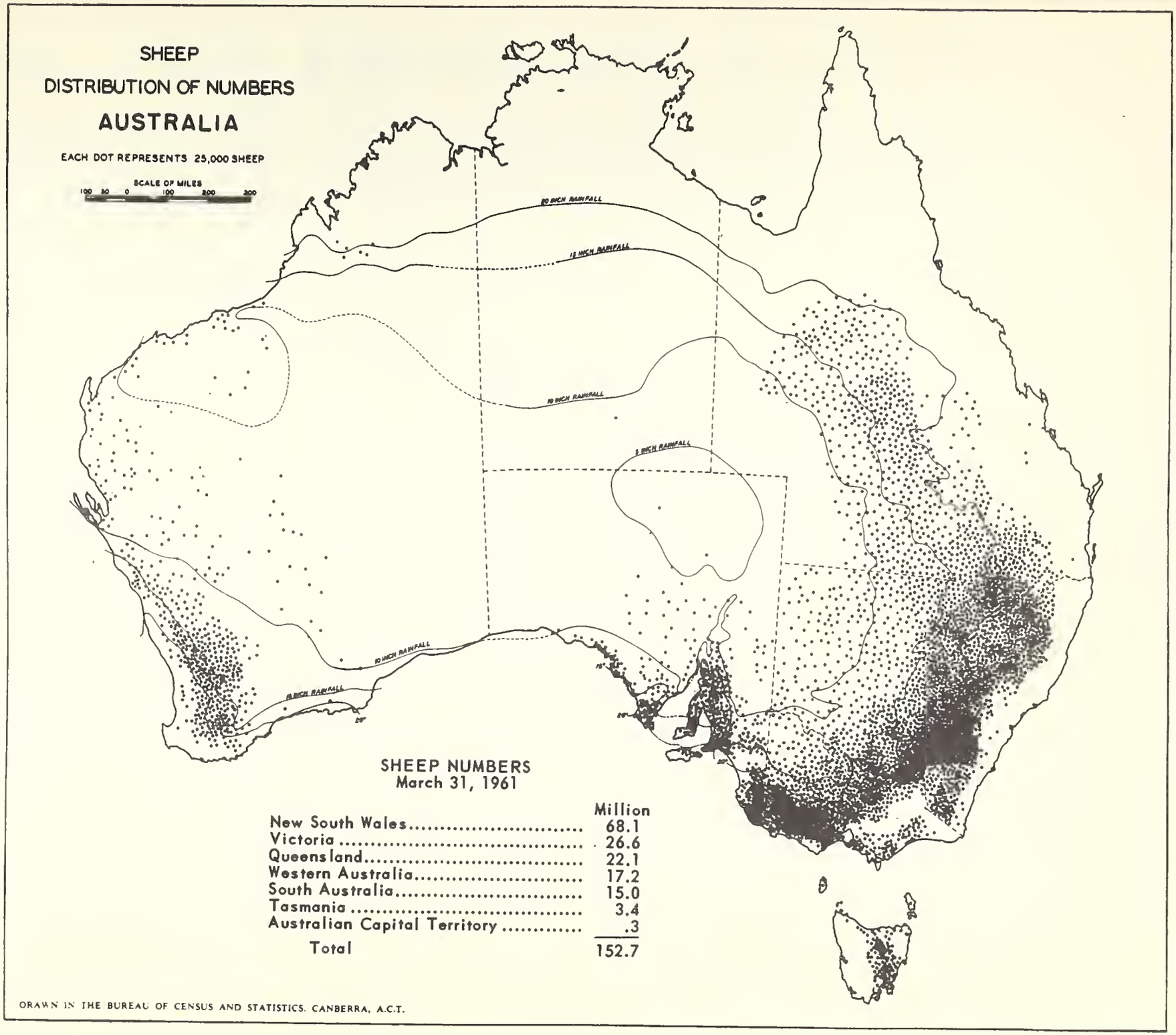


RECENT TRENDS IN

AUSTRALIA'S LIVESTOCK INDUSTRY

U.S. DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service
May 1962 FAS-M-134


BEEF CATTLE
DISTRIBUTION OF NUMBERS
AUSTRALIA
EACH DOT REPRESENTS 2,500 CATTLE
SCALE OF MILES
100 50 0 100 200 300
20 INCH RAINFALL
15 INCH RAINFALL
10 INCH RAINFALL
5 INCH RAINFALL
10 INCH RAINFALL
15 INCH RAINFALL
BEEF CATTLE NUMBERS
March 31, 1961
Thousands
Queensland 5,789
New South Wales..... 2,961
Victoria 1,147
Northern Territory 1,128
Western Australia..... 876
South Australia..... 313
Tasmania 179
Australian Capital Territory 9
Total 12,402
DRAWN IN THE BUREAU OF CENSUS AND STATISTICS, CANBERRA, A.C.T.


SHEEP
DISTRIBUTION OF NUMBERS
AUSTRALIA
EACH DOT REPRESENTS 25,000 SHEEP
SCALE OF MILES
100 50 0 100 200 300
20 INCH RAINFALL
15 INCH RAINFALL
10 INCH RAINFALL
5 INCH RAINFALL
10 INCH RAINFALL
15 INCH RAINFALL
SHEEP NUMBERS
March 31, 1961
Million
New South Wales..... 68.1
Victoria 26.6
Queensland..... 22.1
Western Australia..... 17.2
South Australia..... 15.0
Tasmania 3.4
Australian Capital Territory 3
Total 152.7
DRAWN IN THE BUREAU OF CENSUS AND STATISTICS, CANBERRA, A.C.T.

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This publication supersedes FAS-M-63, "Australia's Livestock and Meat Industry . . . and the U.S. Producer," October 1959.

RECENT TRENDS IN AUSTRALIA'S LIVESTOCK INDUSTRY

By Dwight R. Bishop
Livestock and Meat Products Division

SUMMARY

Sheep numbers in Australia have increased by 37 percent and cattle numbers by 23 percent since 1950; a further increase is likely, particularly if meat and wool prices continue relatively high. Australia has 155 million head of sheep--nearly five times the U.S. total, and it has 18 million cattle, compared with 100 million in the United States.

Australian beef production has been increasing sharply. Output in 1959 reached an alltime high of 2 billion pounds because of a sharp increase in prices and heavy marketings in some areas affected by drought. Productivity per cow has gone up significantly in the past 20 years.

In sheep farming, emphasis is on wool production; nearly 30 percent of the Australian sheep are wethers. Although lamb crops are small, mutton and lamb production reached a high of 1.3 billion pounds in 1959, compared with 738 million in the United States.

In Australia, as elsewhere, pastoral production is greatly affected by drought, but Australian producers are becoming less vulnerable to it as pastures are improved, more supplemental feed produced, new land reclaimed and irrigated, and rabbits destroyed. Also, wild dogs and kangaroos are being controlled, as are cattle ticks and pleuropneumonia, and more adaptable livestock is being developed, particularly heat-resistant cattle for Northern Australia.

Helpful also to the pastoral industries are the liberal land policies of the State and Commonwealth Governments and the price guarantee program for beef, lamb, and mutton exported to the United Kingdom under the terms of a 15-year meat agreement with the United Kingdom, which began in 1952.

Australian meat output totals about 3.2 billion pounds, and domestic consumption about 2.4 billion, leaving about 800 million pounds for export. Australia depends upon exports to market approximately one-fourth of its meat production (in terms of carcass equivalent). At one time, nearly all of this went to the United Kingdom, but since World War II, the proportion has gradually declined, and during 1961 the United Kingdom accounted for only 40 percent of the total meat trade.

Under the 15-year agreement, Australia's exports of meat to the United States and other countries not under the British flag were limited to small amounts under a so-called free quota. In 1958, however, lower quality beef and all grades of lamb and mutton were freed from quota restrictions. There was an immediate large increase in shipments of meat, mostly frozen boneless beef and mutton to the United States, which generally offers a more attractive market for Australian meat than the United Kingdom, even though shipping costs, including customs duties, are considerably more than those to England. All quota restrictions were removed in October 1961.

Australia may continue to export frozen beef and mutton to the United States in large enough quantities to offer competition for U.S. producers. This would mainly affect domestic beef prices, since imported mutton is more competitive with manufacturing beef than with other meats. U.S. prices of boneless beef and mutton could, however, decline substantially until they reach a level where imports from Australia would cease. Imports of higher grade beef and lamb carcasses or cuts are not expected to be large enough to affect U.S. meat prices materially.

Australia is the United States' largest supplier of sheep and lamb casings, and at times an important supplier of sheep and lamb skins. On the other hand, Australia is the second largest U.S. market for hog casings, of which the United States is a large net exporter.

LIVESTOCK

Importance of Industry

Although the largest share of its national income is now derived from manufacturing industries, Australia continues to depend upon agriculture as the source of raw materials for many of its processing industries and of more than three-fourths of its foreign exchange.

During 1960-61, income from livestock (including dairy) was equivalent to $1.8 billion, or 67 percent of the total cash income received from farming. Of this amount, 43 percent was derived from wool sales and 34 percent from the marketing of cattle, sheep, and hogs.

TABLE 1.--Agricultural products: Value of exports, 1958-61[1]

Product	1958	1959	1960	1961
	Million dollars	Million dollars	Million dollars	Million dollars
Livestock:				
Wool, raw	852	713	921	801
Beef and veal	48	125	125	90
Mutton	5	13	11	17
Lamb	14	18	10	13
Pork	1	1	1	1
Canned meat	34	35	30	21
Total	954	905	1,098	943
Dairy:				
Butter	35	57	66	46
Cheese	4	10	11	10
Condensed milk	12	9	9	7
Dried milk	12	14	16	14
Total	63	90	102	77
Other agricultural:				
Wheat	96	116	173	274
Other grains	28	59	45	55
Fruits	75	76	65	61
Sugar	78	72	60	79
Miscellaneous	83	98	97	87
Total	360	421	440	556
Grand total	1,377	1,416	1,640	1,576

[1] Year ending June 30.

Cattle

Numbers of cattle in Australia as of March 31, 1962, are estimated at an alltime high of 18 million head, representing an increase of almost 4 percent over the record level of the year before. Beef cattle numbers have increased from 11.6 million head in 1960 to approximately 13 million in 1962, while the dairy cattle population has remained virtually unchanged. Pasture improvement, development of water supplies, and better herd management have increased the carrying capacity of properties and also shortened the time required to finish cattle for slaughter.

Practically all of the increase in beef cattle numbers between 1959 and 1961 occurred in the States of New South Wales and Victoria where diversified farming predominates, rather than in Queensland and Northern Territory where cattle raising is generally a specialized and extensive operation. Nevertheless, Queensland continued to be the leading cattle State, with 40 percent of total cattle population in 1961. New South Wales had 25 percent, followed by Victoria with 17 percent. This leaves 18 percent for the remainder of the country.

Extensive pasture improvement in the diversified farming areas has permitted the shift into beef cattle. Also, severe drought conditions in many regions of northern and eastern Australia prevented expansion in cattle numbers in Queensland and Northern Territory during 1959-61.

In recent years, beef cow numbers have increased markedly and in 1961 constituted 49 percent of the beef cattle population. Therefore, the outturn of slaughter cattle can be expected to show an upward trend as long seasonal conditions and market prices are reasonably favorable.

Increased demand for good-quality beef by the rapidly growing domestic population and for manufacturing quality for export to the U.S. market at relatively high prices are the factors responsible for the sharp increase in beef cattle production.

Although dairying is an important farm enterprise, the dairy cattle population of about 5 million head has not changed significantly in the past quarter century. With no marked change in prospect for demand of dairy products, the milk cow population is expected to remain at about the same level at least for the next few years.

TABLE 2.--Cattle and calves, sheep and lambs: Number on farms and total slaughter, average 1951-55, annual 1957-62

Year	Cattle and calves			Sheep and lambs		
	Number on farms[1]	Total slaughter[2]	Slaughter as percent of number	Number on farms[1]	Total slaughter[2]	Slaughter as percent of number
	Mil. head	Mil. head	Percent	Mil. head	Mil. head	Percent
Average:						
1951-55.....	15.3	4.1	27	122.8	19.4	16
Annual:						
1957.....	17.3	5.0	29	149.8	20.2	13
1958.....	16.9	5.3	31	149.3	24.7	17
1959.....	16.3	5.9	36	152.6	27.6	18
1960.....	16.5	5.0	30	155.2	32.8	21
1961.....	17.3	4.4	25	152.7	32.2	21
1962[3].....	18.0	4.9	27	155.0	32.3	21

[1] As of March 31.
[2] Year ending June 30.
[3] Preliminary.

TABLE 3.--Cattle numbers, by States, 1957-61[1]

State	1957	1958	1959	1960	1961
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
Queensland	7,462	7,187	6,884	7,012	7,002
New South Wales	3,911	3,736	3,663	3,841	4,242
Victoria	2,765	2,750	2,651	2,624	2,864
Northern Territory	1,176	1,244	1,099	1,110	1,128
Western Australia	957	997	1,000	1,030	1,100
South Australia	621	597	576	500	561
Tasmania	354	371	375	375	394
Australian Capital Territory	11	10	9	11	12
Total	17,257	16,892	16,257	16,503	17,303

[1] As of March 31.

TABLE 4.--Sheep numbers, by States, 1957-61[1]

State	1957	1958	1959	1960	1961
	Mil. head	Mil. head	Mil. head	Mil. head	Mil. head
New South Wales	67.7	65.4	68.0	71.0	68.1
Victoria	25.8	27.1	26.9	26.6	26.6
Queensland	23.2	22.3	22.2	23.4	22.1
Western Australia	14.9	15.7	16.2	16.4	17.2
South Australia	15.0	15.2	15.6	14.0	15.0
Tasmania	2.9	3.3	3.5	3.5	3.4
Australian Capital Territory	.3	.3	.3	.3	.3
Total	149.8	149.3	152.7	155.2	152.7

[1] As of March 31.

Shorthorns and Herefords, and in some areas Aberdeen Angus, are the main beef breeds. Brahman and Santa Gertrudis cattle have been introduced into Northern Australia where they have proved to be highly adaptable in resisting heat and insects in the tropical areas. They have become exceedingly popular, particularly for crossing with the English breeds, but as yet cattle with Brahman blood represent only a small percentage of the total beef animals.

Sheep

Australia has a larger sheep population than any other country and is the world's major producer and exporter of wool. Sheep raising is the most important source of rural income; it accounted for approximately 40 percent of the total value of agricultural production during 1959-61. Wool is the country's major foreign exchange earner, with exports during 1959-61 equal to 42 percent of the total value of all commodities exported.

The long-term trend in sheep numbers has been upward, although interrupted at times by severe droughts. Australian sheep population reached an alltime high of 155 million in 1960. There was a drop of about 2 percent during 1961, attributed to drought conditions, relatively low wool prices, and heavy slaughter.

In 1961, the sheep population was composed of 52 percent ewes, 28 percent wethers, and 1 percent rams, all over 1 year old. The high percentage of wethers indicates that relatively good returns have been obtained from wool production. Lambs under 1 year of age accounted for 19 percent of the total sheep numbers.

Lamb crops are small. Farmers have been reluctant to incur the additional expense of saving more lambs. Most of their returns have been from wool production rather than fat lambs. As a result, production of mutton and lamb per head of sheep in Australia has been extremely low in comparison with many other countries.

Increased domestic consumption, an expanding export market for mutton and lamb and reduced returns from wool are resulting in a shift from production of wethers to production of ewes and lambs in those areas where there is sufficient rainfall for improved pastures.

The heaviest concentration of sheep is found in New South Wales, which has 45 percent of the total sheep population. About 17 percent are in Victoria and 15 percent in Queensland. The States of South and Western Australia have most of the remainder.

The Merino is by far the most popular breed of the sheep in Australia, accounting for three-fourths of the total. Approximately 10 percent are other pure breeds (predominantly Corriedales) and the remainder crossbreeds.

Hogs

Australia's hog population is small in comparison with cattle and sheep numbers. Hog production has declined since the record peak of 1.8 million head reached in 1941, but there has been some recovery in recent years. The 1.6 million head recorded for 1961 was the highest in more than 10 years.

Most hogs are produced on dairy farms and fed skim milk supplemented with limited amounts of barley, oats, and other cereals.

Pork production has been most entirely for the domestic market during the postwar period. Less than 2 percent of the output has been exported since 1956.

Production Methods

Although conditions vary widely from one part of the country to another, generally livestock properties are large. In the more developed southeastern part of Australia, they range up to 5,000 acres, with holdings of less than 700 acres in many sections being regarded as too small for successful operation. In central Queensland, holdings of 20,000 acres are common, while in the northern and western part of the State, properties frequently exceed a quarter million acres. In Northern Territory, as well as in the Kimberley region of Western Australia, a number of cattle stations have 5,000 square miles, or over 3 million acres. Carrying capacity of this area is limited to as low as 6 head per square mile by a long dry season, and attempts to operate units of less than 1,000 square miles have frequently been unsuccessful. Most of the properties in this region are held by large corporations.

Because of a constantly increasing population, it has long been government policy to reduce the size of individual holdings in areas where capacity of pastures can be increased and other development factors are favorable for more intensive land use.

Land tenure is controlled by the State Governments and landownership laws vary from State to State. In general, land titles are issued to individuals only in the more intensively developed areas. Most of the land used for grazing livestock is leased from the State or Territorial Government, usually on a long-term basis. Under certain conditions, the government may resume possession of land for the purpose of subdividing into smaller units. This land tenure system has limited the long-term credit that is available to livestock producers.

In the States of New South Wales and Victoria, it is generally the practice to run cattle and sheep together on the same pastures. As the carrying capacity is increased through the use of fertilizers and seeding with clover and improved grasses, the prevalent practice is to increase the number of cattle while maintaining the same number of sheep. A considerable number of dairy farmers are disposing of milk cows and shifting to beef cattle.

Practically all of the cattle are fattened on pastures. There are a few small feedlot operations on an experimental basis, but it is the general opinion that the price of grain relative to the price of cattle has been too high to make grain feeding economical. Furthermore, no market has been developed as yet in Australia for highly finished beef.

About 5 million acres are now being used for hay and green fodder crops, and this area is expected to increase significantly as livestock numbers become more concentrated.

In the southeastern part of the country and in those parts of western Australia where rainfall is adequate, there has been rapid and extensive development of improved pastures. The area in improved pastures is now more than three times that devoted to crop production. To a limited extent, utilization of dry native grasses has been increased by spraying with molasses and the feeding of urea.

In the more arid parts of Australia, development of stock-water reservoirs and wells has expanded the area available for grazing and greatly reduced stock losses due to drought.

Nevertheless, recurring cyclical droughts and irregular rainfall will continue to limit the number of livestock that can be raised in most parts of the country. The long dry season occurring north of the Tropic of Capricorn also acts as a limiting factor since the stocking rate is determined by the number of head which can be carried through the dry period.

Rabbits, once a serious pest, have now been greatly reduced in numbers, but in some areas control measures to curtail populations involve considerable expense.

Sheep are not raised in the coastal and northern part of Queensland, Northern Territory, and the Kimberley region of Western Australia because of the prevalence of spear grass, which has sharp points that penetrate the skin of sheep, and sheep-killing dingos (wild dogs).

Most of the northern part of Australia is infested with ticks which infect cattle with tick fever. Although the more efficient operators dip cattle several times a year as a control measure, a complete eradication of ticks has not been accomplished because the extensive nature of operations and lack of fencing prevent a complete roundup of all animals for dipping. Usually enough cattle are left untreated to reinfect the herds.

Potential for Increased Production

Although production of meat in Australia has expanded by approximately 50 percent during the last 10 years, there remains a large potential for similar or even greater expansion in the future. Production can be further increased by expanding grazing areas, clearing land now in brush, and constructing roads which would permit cattle raised in remote areas to be transported to market.

The carrying capacity of pastures can be more than doubled by fertilizing and seeding with improved varieties of grass and legumes. Water conservation measures, such as construction of reservoirs and drilling of wells, would make it possible to raise livestock in many areas not now being utilized. The application of only trace element fertilizers would greatly increase grazing capacity in some extensive regions.

In Queensland there are some 15 million acres covered by brigalow scrub which, when cleared, would have a high carrying capacity. North of Perth in western Australia there is a sand dune area with adequate rainfall where improved pastures have been successfully established. Only a fraction of the total acreage has as yet been developed. In the Northern Territory, the Kimberley region of Western Australia, and the northern part of Queensland, the number of beef cattle marketed could be greatly increased provided adequate roads were built to enable the animals to be trucked to market.

Further expansion in the livestock industry will depend upon the price of meat on the domestic and export markets.

Marketing Practices

In northern Australia it was formerly the practice to drive cattle several hundred miles to the railheads for shipment to slaughterhouses. Despite the lack of suitable roads in many sections, the hauling of cattle by motor trucks to the railroad loading pens is a development which has grown rapidly. By 1961 over half of the cattle from the north were moved by truck.

In other parts of Australia the custom of driving cattle and sheep on foot to the sale yards has largely disappeared. If rail facilities are available they will generally be shipped to the slaughterhouses by rail because it has long been government policy to discourage truck lines from competing with the railroads, which are state owned. This is accomplished by charging trucks a high "road tax" for using a road between two points connected by rail. However, this tax does not apply to inter-State commerce and there is a growing movement of livestock and meat by inter-State truck transport.

Generally, railroad cars for transporting livestock are considerably shorter than U.S. cattle cars, and hold fewer animals. There are different gages of track from one State to another, making reloading to other cars necessary at junctions. However, since most of the livestock are marketed intra-State this is not a major problem. Many of the locomotives are steam-driven, coal-burning types. Since rail transport of livestock under these conditions is expensive and inefficient, it is expected that transport by truck will continue to become more popular.

In recent years there has been a trend toward the slaughter of younger cattle from 12 to 15 months of age, in order to meet a growing demand for better quality beef for the domestic market. Boneless beef for the U.S. market is obtained from cull cows and old bulls from the southeast area, and 4- to 5-year-old steers from northern Australia. Previously, it was not possible to market younger cattle or old cows from the north because they could not withstand the long drive on foot. Now that truck transportation has been developed, it is expected that there will be a considerable increase in the numbers of these types of cattle reaching market.

Lambs are slaughtered at 4 to 5 months of age. Production is largely for the domestic market, only about 10 percent being exported. Since 1959 there has been a good market for old ewes from which boneless mutton is produced for export, primarily to the United States.

Most livestock is sold at local or terminal markets by auction. The agent sorts the animals in salable lots, conducts the auction, and accounts for the proceeds. Also, there are a number of sales of livestock between ranchers, and slaughterers buy some livestock direct.

Principal livestock yards are located in or near large cities. Slaughter plants generally have holding pastures where animals are grazed until ready for slaughter. All livestock are normally sold on a per-head basis. Cattle and sheep buyers must be able to accurately estimate the dressed weight and carcass value of a pen of livestock.

Most of the privately owned meat-packing plants also operate ranches and engage in both raising and fattening livestock. In this way, they are assured of a supply of slaughter animals without depending entirely upon outside purchases. Some of the largest plants are owned by municipalities and engage in custom slaughtering, collecting fees for dressing, cutting, and otherwise preparing meat. In Australia, custom slaughter is considerably more common than in the United States.

At some slaughter plants, a producer has an option of selling on the basis of dressed carcass weight and grade or by the head. Dressed weight is determined at the time the carcasses go into the coolers. Therefore, little additional accounting is required since all carcasses are weighed at that point.

In general, the meat-packing plants are modern and efficient. However, labor costs are high because of the degree of unionization, which has placed limits on the amount of work each man is required to do. Many of the meat-packing plants are closed part of the year; this makes it difficult to maintain an efficient labor force and also results in increased overhead costs.

Most major meat-packing plants are located near ports to facilitate loading on ships. A number of plants are being built and many old ones remodeled. There is also a considerable increase in plant facilities for boning meat. A recent trend has been the construction of small plants in the livestock producing areas.

The terminal markets are usually owned by municipalities which collect fees for services performed. Wholesale trade is conducted much as in the United States. Much of the sausage and other prepared meats are manufactured by wholesalers. Retail sales are handled mostly by specialized butcher shops. Marketing of precut, prepared consumer cuts of meat is not common in Australia.

Government Assistance to Producers

Commonwealth and State Governments have made a substantial outlay of public money to provide assistance and stimulus to cattle and sheep production. These governments are helping both to build and to maintain stock-water reservoirs and also to drill wells along stock routes. Pest eradication programs have been intensified and research programs accelerated.

Cash costs of improving pastures by top dressing, planting, ringbarking trees, and control of rabbits and marsupials are considered as operating expenses under Commonwealth law rather than as capital improvements. This fact provides considerable incentive for graziers to spend money in improving the productive capacity of their holdings, since they thereby reduce their income taxes.

Many large properties are being subdivided into smaller units by the refusal of the government to renew leases when they expire. The "closer settlement" policies are political and controversial. However, the objective is to create units small enough to be properly developed, but large enough to constitute an economic unit. One argument is that large graziers have been using the land at low rentals and have not made enough progress in pasture improvement and other developments. On the other hand, some claim that the smaller subdivisions will soon revert to the former operators because the new operators do not have the experience and funds to develop them.

A 15-year agreement with the United Kingdom, which came into force July 1, 1952, was designed to bring about an increase in Australia's meat production and to provide an export market for its surplus production. Australian livestock producers are assured minimum prices for each type of meat. When prices fall below guaranteed minimums, the deficiency is made up by the United Kingdom, which periodically pays the Australian Government. This is passed on to the producer through "bounty" payments made on frozen meat delivered into store for export.

United Kingdom deficiency payments during the 4-year period ending June 30, 1958, were equivalent to $22.5 million. Australia paid substantial "bounties" on meat and thereby supported to some extent prices of live animals.

Australia halted all bounty payments during 1959 and 1960 since U.K. market prices had exceeded the minimum price levels. Bounty payments amounting to 2 shillings (22 U.S. cents) per carcass and 3/4 pence per pound for piece lamb were resumed on all spring lamb delivered into store between August 1, 1961, and February 28, 1962, and exported to the United Kingdom.

MEAT

Australian Meat Board

The Australian Meat Board, composed of processors, exporters, and the Commonwealth Government, was organized in 1935 to exercise control over meat exports. Since World War II, it has been the dominating influence in the formulation of meat production and marketing policies.

The Board gives financial and other assistance to organizations active in further developing export trade in meat. In the interest of orderly marketing, the Board maintains a list of approved importers in various foreign countries including the United States, and Australian exporters are restricted in trading to consignees approved by the Board.

Funds are granted by the Board for extensive research on practically all phases of livestock production and marketing. Finances are obtained by an export tax on all kinds of meat.

The Meat Board handles the deficiency payment funds received periodically from the United Kingdom under terms of the meat agreement, and recommends the rate of payments to Australian producers.

Slaughter Trends

Cattle slaughter for the year ending June 30, 1962, is forecast at 4.9 million head, a slight increase over the previous 12 months, but considerably below the record high of 5.9 million head established in 1959.

The proportion of cattle slaughtered to total numbers has increased significantly in the last 10 years, mainly because favorable prices have encouraged producers to market animals at an earlier age. It is also the result of the general technological improvement, which has made possible the production of more meat per head of livestock population.

Sheep and lamb slaughter reached an alltime high of 32.8 million head in 1960, an increase of 69 percent over the 1951-55 average. Slaughter for 1962 is expected to be about a half million head below the record level.

Hog slaughter reached the highest level in more than 10 years in 1961 when 2.3 million head were processed. Forced marketings brought on by an outbreak of hog cholera contributed to the increase.

Inspection and Grading

The Commonwealth Meat Inspection Service, Department of Primary Industries, is responsible for inspecting the slaughter facilities producing meat for export and the animals slaughtered. Export firms must maintain the sanitation of their plants or suffer revocation of license.

In addition to the Commonwealth inspection, most States have inspection systems for meat for local consumption. Also, a number of shires (counties) have laws governing inspection.

Commonwealth inspection officials supervise the grading of meat for export, but the graders are actually employees of the slaughter plant. As the carcasses reach the end of the slaughter line, they are weighed and graded. The grader denotes the grade by affixing a tag to the carcass. This tag serves also as the official inspection certificate.

Australia has three basic classes of export beef: 1st-quality, 2d-quality, and 3d-quality, or manufacturing. There is some production of baby beef and yearling beef, but these are not big export items. All carcasses grading yearling and baby beef are in the chiller grade of ox and heifer beef. Carcass classifications are based on sex and age; for example, 1st-quality ox beef, 2-d quality cows, or 2d quality ewe. Shipments of beef, lamb, and mutton to the United Kingdom and the United States must be stamped to denote the country of origin.

Labels on the stockinettes of chilled or frozen carcass meats and on cartons of boneless meat are printed in distinctive colors. Blue lettering denotes 1st quality, red lettering 2d quality, and black lettering 3d quality.

Since there is virtually no grain feeding of cattle in Australia, there are few steer or heifer beef carcasses produced which grade as high as U.S. Choice. A few would grade Good, but the bulk of the production would fall in the Standard and Commercial grades. Most of the steers and heifers marketed are much older than those in the United States.

Old cull cows from dairying and beef herds would normally grade utility, canner, or cutter. However, a number of fat cows marketed because they are shy breeders, or for some other reason, would grade commercial.

A number of heavy calves are being marketed for slaughter from both dairy and beef herds. These calves have either run with their mothers or have been fed liberal amounts of skim milk. Some of these would grade Choice by U.S. standards, but few would grade Prime.

Most lambs are relatively lean. A distinction is usually made between milk-fed lambs (suckers) and other lambs which have been weaned; lamb carcasses, however, are usually not differentiated in this way. Lamb for domestic sale is branded with a roller stamp so as to protect the purchaser. Yearling and mutton are not so marked. Some of the mutton from old wethers is rather fat, but shipments of boneless mutton to the United States are produced largely from old cull ewes and have little fat.

Meat Production

Australian meat production, on a carcass weight basis, reached a record high of 3.4 billion pounds for the year ending June 30, 1959. There has since been some decline as more cows were retained to build up breeding herds, but production during 1962 is expected to recover to within 200 million pounds of the record level and exceed the 1951-55 average by 30 percent.

Beef and veal production reached a peak of 2 billion pounds in 1959, as alltime high prices coincided with drought conditions in parts of northern Australia resulted in a record number of cattle being marketed. Production has since declined as cattle were relatively short and producers tended to retain more cows in breeding herds.

Mutton and lamb production for 1962 is expected to approach the alltime high of 1.3 billion pounds attained in 1960. A strong demand for mutton has made it profitable in recent years to market aged ewes which formerly would have been allowed to die on the property.

Pork production totaled 240 million pounds in 1961, the highest level in more than 10 years but slightly below the peak annual average of 262 million pounds for the period 1941-45.

The production of canned meat reached a peak of 210 million pounds in 1953 and continued fairly high until 1961 when meat canning operations declined because of more attractive outlets for frozen processing-type beef and mutton in export markets.

Only about one-fifth of the canned meat production is consumed domestically and the industry is consequently based largely on the export market, which has declined in recent years.

Of the total red meat production for fiscal 1962, it is estimated that beef and veal account for 53 percent, mutton for 26 percent, lamb for 14 percent, and pork for 7 percent.

TABLE 5.--Meat: Production, by kind, (carcass weight), average 1951-55, annual 1957-62

Year ending June 30	Beef and veal	Mutton	Lamb	Pork	Total
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Average:					
1951-55	1,492	509	253	195	2,449
Annual:					
1957	1,826	502	320	199	2,847
1958	1,773	604	340	232	2,949
1959	2,032	694	408	226	3,360
1960	1,669	827	452	226	3,174
1961	1,438	808	455	240	2,941
1962[1]	1,680	818	455	240	3,193

[1] Preliminary.

TABLE 6.--Canned meat: Production by kind, (product weight), 1957-61[1]

Commodity	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Canned beef	37.3	37.4	33.3	20.7	15.9
Minced beef loaf	23.7	23.8	17.4	14.3	9.7
Other beef	40.4	47.1	49.5	24.3	17.0
Corned mutton	1.7	8.4	5.2	13.6	5.1
Other mutton	9.3	14.1	16.1	25.9	10.3
Bacon and ham	7.9	8.6	8.9	7.4	7.3
Other pork	.3	.3	.4	.3	.8
Camp pie[2]	7.8	13.2	9.3	10.1	10.4
Other mixed meat	6.5	8.7	4.8	13.5	13.8
Sausage	1.3	.9	1.8	1.8	1.1
Meat and vegetables	14.3	16.2	18.9	24.7	20.0
Total	150.5	178.7	165.6	156.6	111.4

[1] Year ending June 30.
[2] Mixture of ground meat and cereals.

Domestic Meat Consumption

In recent years, per capita meat consumption has declined approximately 20 pounds from the prewar (1937-39) average. On the other hand, total consumption has increased because of the rapid rise in population. Australians now consume around 2.4 billion pounds of meat annually, compared with the 1937-39 average of 1.7 billion pounds. About three-fourths of the total meat production is consumed domestically--the same proportion as before the war.

Because of high domestic prices and a strong export market, per capita consumption of beef and veal dropped to a postwar low of 86 pounds in 1961. There was a sharp increase in domestic consumption of mutton and lamb as consumers switched to more economical cuts.

TABLE 7.--Meat: Estimated total and per capita consumption, by kind, 1957-61[1]

Commodity	1957	1958	1959	1960	1961
TOTAL	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Beef and veal[2]	1,229	1,213	1,170	991	898
Mutton[2]	446	504	548	647	641
Lamb[2]	264	277	317	396	390
Pork[2]	83	109	107	106	119
Variety meats	99	115	120	118	113
Canned meat[3]	34	39	47	42	(4)
Bacon and ham[5]	65	68	71	71	(4)
Total[6]	2,264	2,377	2,437	2,416	(4)
PER CAPITA	Pounds	Pounds	Pounds	Pounds	Pounds
Beef and veal[2]	129	124	118	98	86
Mutton[2]	47	52	55	64	62
Lamb[2]	28	28	32	39	38
Pork[2]	9	11	11	10	12
Variety meats	10	12	12	12	11
Canned meat[3]	4	4	5	4	(4)
Bacon and ham[5]	7	7	7	7	(4)
Total[6]	237	244	245	238	(4)

[1] Year ending June 30. [2] Bone-in weight. [3] Canned weight. [4] Not available. [5] Cured weight. [6] In terms of carcass weight.

OTHER PRODUCTS

Wool

Australia is the world's major wool producing and exporting country. Its wool trade has been built not only on volume but on the outstanding quality of its fleeces. The country produces apparel wool, which can be divided broadly into two classes, Merino and crossbred. Merino is finer and softer than crossbred and is used extensively for the manufacture of quality fabrics. Virtually all of the Australian production is of the types produced in the United States.

TABLE 8.--Wool: Production, greasy basis, average 1951-55, annual 1957-62

Year ending June 30	Production	Year ending June 30	Production
	Million pounds		Million pounds
Average:		Annual:	
1951-55	1,202	1959	1,591
Annual:		1960	1,680
1957	1,564	1961	1,632
1958	1,433	1962[1]	1,692

[1] Preliminary.

Australian wool production is forecast at a record high of 1.7 billion pounds (greasy basis) during the year ending June 30, 1962. This amounts to 30 percent of the world's output. The 1962 clip is expected to be 40 percent above the 1951-55 average.

Wool is produced in all of Australia's States, but New South Wales is by far the most important producer, accounting for over 40 percent of the total clip. Victoria, with 20 percent of the output, is the second most important State; Queensland ranks third with 15 percent.

Drought, overstocking, changes in land use, and the rabbit menace have caused a number of fluctuations in the long-term upward trend in sheep numbers and wool production. Rabbits have long competed with sheep for the grasslands, and have ruined large tracts by eating the grass down to the roots. In recent years, however, rabbit numbers have been greatly reduced and no longer cause serious damage to pastures.

More than 90 percent of the wool produced in Australia is sold at auctions. An average of more than 1 million bales (300 pounds each) is offered annually at Sydney, which has become the world's most important wool-selling center.

Wool auctions are held in all Australian State capitals and in a number of other cities. To facilitate selling, catalogs are divided into large lots and star lots. In the northern markets, large lots consist of five bales or more; in the southern, they are four bales or more. Smaller quantities are known as star lots, and those from several producers are often combined to form composite large lots. As many as 400 to 600 lots may be sold in an hour.

In general, wool is offered for sale in the order in which it is received at the warehouse. Sales are distributed throughout the selling season--late August through June--so that there are no gluts on the market at any one time. The National Council of Wool Selling Brokers sets up a tentative wool-selling schedule for each of the auction centers well in advance of the selling season. The amount of wool offered at each sale is determined by the preliminary estimate of the season's wool production and receipts into warehouse. As production conditions change, revisions are made in the quantities offered.

Wool is the only major export commodity sold under the free auction system and not controlled by a marketing board. Wool growers offer their wool through a broker at public auctions to the highest bidder. A reserve price may be placed on any lot by the seller, which gives him an opportunity of offering his wool again later.

The selling of wool at auction is greatly facilitated by the preparation of wool at the shearing shed on the farm. Before being sheared, the sheep are usually sorted according to age and sex. Wool from rams, ewes, wethers, yearlings, and lambs is kept separate. The shearer first clips the wool from the brisket, belly, britch, and the inside of the legs; this is graded separately from the main fleece, which is sheared in one piece. The fleece

is skirted, folded and rolled but not tied, as is the custom in the United States. The fleece roll is then graded on quality characteristics and baled with other fleeces of the same commercial classification. The bale is labeled with the producer's name and district and the commercial class, given a serial number, and then shipped to a broker's warehouse at one of the auction centers, together with the classer's report of the type of wool. The buyer, who is familiar with the climatic and growing conditions in the area, has a good idea of the conditions of the clip before he inspects it in the broker's warehouse. Because of better market preparation, Australian wool generally commands a premium in the Boston market over U.S. wool of a corresponding grade.

The main function of the wool broker is to display and sell the wool grower's clip. Broker's charges, including commission, handling, and delivery charges, vary with different States and the quantity handled. Total charges for these services is about 2 cents a pound. The broker also provides classers to cull the flock and classify wool at shearing time, and may provide financing and other services to the growers. He may also deduct from the grower's returns any charges paid on the grower's behalf, such as those under the Wool Tax Act of 1952 (0.15 cents a pound), freight, and insurance.

Transportation charges from an Australian to a U.S. port amount to about 5 cents a pound, greasy basis.

Australian Wool Bureau.--The Australian Wool Bureau was established in 1953, replacing the Wool Board, which had been in existence since 1936. Unlike the Meat Board, the Wool Bureau does not directly control the marketing of wool, which is sold under the free auction system. The principal activity of the Bureau is to promote wool consumption. It also aids in research for increasing production and improving quality and processing of Australian wool.

The Bureau's members are the Commonwealth Wool Appraiser and six representatives of Australian wool growers. It is financed by funds collected under the Wool Tax Act of 1952. The Bureau also compiles detailed statistical data by type and quality of wool sold, and publishes reports on prices and exports.

Tallow and Lard

Although Australia ranks third as a world producer of tallow, it accounted for only 5 percent of the world total in 1959, even though its production in that year set a record. Because of a decline in cattle slaughter, tallow production dropped in 1961. Exports of tallow have been rising, but over two-thirds of the production is normally consumed at home.

The production of lard in Australia is an insignificant part of the world total. In 1961, production amounted to only 0.2 percent of the world lard output.

TABLE 9.--Tallow and lard: Production, average 1951-55, annual 1957-61

Commodity and year ending June 30	Production	Commodity and year ending June 30	Production
Tallow:	Million pounds	Lard:	Million pounds
Average 1951-55.....	243	Average 1951-55.....	10
Annual:		Annual:	
1957.....	316	1957.....	11
1958.....	327	1958.....	12
1959.....	371	1959.....	12
1960.....	337	1960.....	12
1961.....	298	1961.....	12

FOREIGN TRADE

Australia depends upon exports as a market for approximately one-fifth of its production of frozen, chilled, and cured meat. In addition, 80 percent of its canned meat is sold abroad. In terms of carcass equivalent, approximately one-fourth of total production is exported. This is about the same as in prewar (1937-39).

During the period 1958-62, meat exports including canned meat reached a record level and were 38 percent above the 1951-55 average. Foreign sales of chilled and frozen meat showed a significant increase from prewar, while exports of canned meat climbed from a relatively insignificant prewar level to 16 percent of the total meat shipped during 1958-62.

Historically, the United Kingdom has been by far the principal market for Australian meat, generally taking over 90 percent of the exports before World War II. Since the war, the proportion has gradually declined, and by 1961 the United Kingdom accounted for only 40 percent of total meat trade.

Shipments to the United States reached the highest level in 1961--39 percent of the total.

Beef and veal have generally been the major export and in 1961 they accounted for more than half of the total meat shipments. Canned meat made up 12 percent of exports, mutton 15 percent, lamb 12 percent, and variety meats most of the remainder.

Under the 15-year agreement, Australia's exports of meat to countries other than the United Kingdom, British Colonies and Dependencies, were limited to a small "free quota" to be determined periodically. The free quota was not less than 3 percent of exports to the United Kingdom. This agreement was effective in limiting exports to the United States as well as other areas until October 1958, when a major alteration removed lower quality beef and all grades of mutton and lamb from quota restrictions. The free quota then applied only to 1st-quality and 2d-quality beef, on which an annual quota of 7,500 long tons (16.5 million pounds) could be marketed outside the United Kingdom. Pork, canned meat, and all other meat products had previously been exempted from control. Effective October 1961, all restrictions were removed with respect to destinations for meat exports.

TABLE 10.--Meat: Exports by kind, (product weight), average 1951-55, annual 1957-62

Year ending June 30	Beef and veal	Mutton	Lamb	Pork	Variety meat	Canned meat	Total
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Average:							
1951-55.....	204.7	37.0	59.1	9.6	24.9	138.0	473.3
Annual:							
1957.....	347.0	23.5	54.2	2.2	29.8	109.5	566.2
1958.....	277.3	45.7	65.4	2.7	28.9	133.3	553.3
1959.....	509.8	75.3	91.2	2.6	47.1	126.9	852.9
1960.....	420.8	72.8	60.3	1.3	38.8	105.5	699.5
1961.....	293.1	82.9	64.7	1.6	30.3	66.9	539.5
1962[1].....	358.4	94.1	40.3	1.3	40.0	89.6	623.7

[1] Preliminary.

TABLE 11.--Beef and veal: Exports by country of destination (product weight), 1957-61[1]

Country of destination	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
United States	4.5	13.7	128.4	196.8	170.8
United Kingdom	270.0	209.9	333.0	181.5	86.4
Malaya	12.1	11.2	10.6	9.1	8.5
Japan	17.2	6.7	2.7	4.7	7.2
West Indies Federation	2.4	4.3	7.5	5.4	4.3
Hong Kong	9.6	5.6	3.6	2.0	2.6
Western Europe[2]	7.6	6.3	5.2	6.7	2.1
Philippine Republic	8.5	6.0	3.4	2.4	1.4
Other countries	15.1	13.6	15.4	12.2	9.8
Total	347.0	277.3	509.8	420.8	293.1

[1] Year ending June 30.
[2] France, Belgium, Netherlands, and West Germany.

TABLE 12.--Mutton and lamb: Exports by country of destination (product weight), 1957-61[1]

Country of destination	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Mutton:					
United States	.2	11.2	36.4	33.7	36.8
United Kingdom	14.8	25.5	27.4	20.0	16.2
Canada	--	.1	2.1	4.3	10.5
Japan	--	--	--	2.4	4.8
Malaya	1.6	2.7	3.0	3.5	4.7
Other countries	6.9	6.2	6.4	8.9	9.9
Total	23.5	45.7	75.3	72.8	82.9
Lamb:					
United Kingdom	44.6	56.0	75.8	41.5	45.0
Canada	3.8	3.8	7.7	6.8	7.1
United States	.9	.2	2.4	5.9	5.2
Malaya	1.8	1.8	1.6	1.4	1.8
Other countries	3.1	3.6	3.7	4.7	5.6
Total	54.2	65.4	91.2	60.3	64.7

[1] Year ending June 30.

Immediately after the restriction was lifted, shipments to the United States, stimulated by the relatively high prices in that market, increased sharply. For the 12 months July 1958 through June 1959, exports of beef to the United States were nine times larger than for the corresponding period a year earlier; mutton shipments were almost four times greater. Beef shipments to the United States reached a record level of 197 million pounds the following year.

Beef and veal exports to the United Kingdom were also at an alltime high. Shipments for the year ending June 30, 1959, amounted to 333 million pounds. Other markets for beef and veal have mostly been to Japan and Malaya. The best market for lamb has been the United Kingdom, which took 70 percent of 1961 exports. The major market for mutton since 1959 has been the United States. That country took a record 37 million pounds, or 45 percent of total shipments, in 1961.

Under the United Kingdom tariff, Australian meat receives preferential treatment and is entered duty free. The duty-free treatment was guaranteed on chilled and frozen beef for 5 years under terms of an agreement signed in 1957.

The United States generally offers a more attractive market for Australian meat than the United Kingdom. Canner and cutter cows, which supply the manufacturing beef sold to the United States, have been bringing about the same price per pound as the better grades of Australian steers slaughtered for the United Kingdom.

Beef and lamb prices in the U.S. market are considerably higher than prices in England. In the past, prices for mutton, lamb, and beef in Australia have largely been based on prices in the United Kingdom, minus transportation and other marketing costs.

The Australian Meat Board estimates total costs for moving meat from slaughter plants in Australia to distribution points in the United Kingdom at 4 cents a pound for beef, 4.5 cents for mutton, and 5 cents for lamb. It costs Australia more to land meat in the United States than in England because of the additional expense of U.S. customs duties. Approximate costs to the U.S. market for boneless beef are:

	Cents per pound
Ocean freight	3.75
Duty	3.00
Miscellaneous costs	1.50
Total	8.25

Costs for frozen lamb carcasses would be slightly higher, for the duty is 3.5 cents per pound and freight is moderately greater.

A substantial number of live cattle are exported to the Philippine Republic and Hong Kong. Practically all of these cattle are shipped from Darwin, where there are no export slaughter facilities.

Frozen Boneless Beef and Mutton

The modification of the 15-year-agreement in October 1958 to permit increased Australian exports to non-Commonwealth markets coincided with a drop in production of manufacturing beef in the United States. Prices of boneless beef were high relative to prices of grain-fed beef; thus a general rise in beef prices caused an unusually strong demand for processing beef and attracted large supplies of frozen Australian boneless beef to the United States.

The shortage of processing beef has also attracted imports of boneless mutton, which is highly competitive with boneless beef. Australian boneless beef may be blended with fatter trimmings from domestic meat and sold as hamburger. It may also be used for such products as frankfurters, other sausages, and luncheon meats. Except in hamburger, a certain amount of boneless mutton may be added to these products. Boneless beef and mutton are usually contracted for on a 90-percent lean basis by U.S. importers. This product, therefore, is highly desirable because of the small amount of fat which it carries.

Australia usually has a surplus of old ewes and wethers as well as cull cows from both dairy and beef herds. Most of these have been used by Australia's meat-canning industry, but some carcasses have been exported, principally to the United Kingdom. Meat marketed in boneless form has some advantages over carcass meat. It requires less storage space and can be stored for longer periods, thus permitting a steady supply during the slaughtering offseason. There is also some saving in transportation costs. For the U.S. market, there is a further saving, since import duties are the same per pound for bone-in as boneless. Approximately three-fourths of the 1961 beef exports were in boneless form.

Frozen Carcass Beef

The United Kingdom takes over 80 percent of the frozen carcass beef, which is generally shipped in the form of hindquarters, forequarter crops, loins, and ribs. About 54 percent of the beef sent to the United Kingdom in 1961 was in bone-in cuts.

Chilled Beef

For a number of years, Australia has exported a limited quantity of chilled beef. Argentina because of being closer to the United Kingdom, has dominated this trade. Chilled beef must be marketed within 50 days of being processed in order to maintain quality--a schedule Australia has had difficulty in meeting. Furthermore, slaughter is seasonal because most cattle are maintained on grass alone; Australia has been unable to supply chiller-quality beef which requires young, well-finished cattle on a year-round basis. Since 1959, the volume of exports has declined and in 1961 amounted to less than 5 percent of the total beef exports.

Frozen Lamb

Although Australia has increased shipments of frozen lamb to the United States and Canada, the major market continues to be the United Kingdom, which took 70 percent of the 1961 exports.

Some Australian firms are now packing boneless rolled shoulders, square-cut shoulders, trimmed lamb loins, legs, and other cuts for shipment to the United States. Lambs generally are considerably lighter than those in the United States and carry much less fat. Lamb exports to the United States will be limited, however, by the comparatively small number of lamb consumers and the competition from chilled domestic production.

Canned Meat

The canned meat industry depends heavily on exports for a market, since only about one-eighth of the canned meat output is consumed domestically. Since World War II, the canned meat trade has grown tremendously; by 1954, exports were 10 times above the prewar average. However, since 1958 this trade has declined because of the demand for boneless frozen meat.

The needs of the war encouraged the canning of meat because in this form it was more easily preserved and shipped. Thus established, the canned-meat industry continued to expand after the war. The United Kingdom has been the main destination of Australian exports and in the last 5 years has taken over 75 percent of total shipments.

TABLE 13.--Canned meat: Exports by country of destination (product weight), 1957-61[1]

Country of destination	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
United Kingdom	85.6	105.1	94.1	77.3	44.7
New Guinea	8.3	8.7	7.9	9.2	8.1
Canada	6.5	9.2	9.6	4.6	3.6
Philippine Republic	1.6	3.8	6.0	5.6	2.4
Other countries	7.5	6.5	9.3	8.8	8.1
Total	109.5	133.3	126.9	105.5	66.9

[1] Year ending June 30.

Tallow

The Republic of South Africa and Japan were the principal markets for Australian tallow in 1959 and 1960. Other significant customers were the United Kingdom and Malaya. The United States, long the major supplier of tallow for the Japanese market, has faced increased competition from Australia during the last 5 years, largely because U.S. exports were restricted by dollar allocations.

TABLE 14.--Tallow, inedible: Exports by country of destination, 1957-61[1]

Country of destination	1957	1958	1959	1960
	Million pounds	Million pounds	Million pounds	Million pounds
South Africa, Republic of	7.7	24.9	25.2	31.8
Japan	10.0	21.2	34.7	31.0
United Kingdom	20.5	10.0	15.2	17.7
Malaya	12.8	6.7	5.2	16.0
Pakistan	4.4	7.6	4.0	12.1
Ceylon	3.8	1.6	2.3	10.3
China, mainland	([1])	1.3	.8	9.1
Burma	15.8	7.1	6.0	9.0
India	5.3	2.9	3.4	7.2
China, Taiwan	([2])	([2])	2.1	5.6
Rhodesia and Nyasaland	6.2	4.7	4.2	5.0
Other countries	18.4	10.3	12.1	17.0
Total	104.9	98.3	115.2	171.8

[1] Year ending June 30.
[2] If any, included in "other countries."

Wool

Since 1959, Japan has replaced the United Kingdom as the principal market for Australian wool, and in 1961 took a record 419 million pounds, or 31 percent of total shipments. The United Kingdom, France, Italy, and Belgium-Luxembourg were the principal European buyers, receiving 46 percent of the 1961 exports. Sales to the United

TABLE 15.--Wool: Exports by country of destination, 1957-61[1]

Country	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Japan	237	205	278	340	419
United Kingdom	331	271	330	291	238
France	221	186	162	166	160
Italy	131	137	120	139	114
Belgium-Luxembourg	110	105	105	108	107
Germany, West	93	78	69	80	69
United States	51	35	43	39	36
Poland	32	39	41	37	30
U.S.S.R	--	--	--	39	30
Czechoslovakia	17	19	21	30	25
China	6	6	11	26	18
Mexico	11	10	15	10	15
Turkey	2	--	7	10	15
Yugoslavia	3	9	9	10	13
Switzerland	8	5	4	6	6
Canada	6	4	5	5	5
Austria	4	5	5	4	5
South Africa, Rep. of	2	3	3	4	5
Portugal	2	4	3	3	4
Netherlands	4	3	3	3	3
Ireland	5	3	3	4	2
Germany, East	--	3	1	6	2
Rumania	--	3	1	2	2
Other countries	24	38	39	33	35
Total	1,300	1,171	1,278	1,395	1,358

[1] Year ending June 30.

States have not been particularly large and have been declining since 1955. Nevertheless, Australia is the largest source for U.S. imports of apparel wool, and receipts from that source during 1961 were equal to 37 percent of U.S. imports of apparel wool. Producers in the United States are protected from competition of Australian wool by tariff and subsidy payments.

Other Products

The United Kingdom has received all but a small percentage of Australia's exports of variety meats. Shipments reached a peak of 47 million pounds in 1959, but have since declined because of a drop in cattle slaughter. Commonwealth tariff preferences give Australia a competitive advantage over the United States in the U.K. market.

Larger production of cattle hides in 1959 enabled Australia to increase shipments to Japan and West Germany, both large markets for U.S. hides. Exports declined sharply during 1960 and 1961 because of short supplies.

Australia is the world's largest producer and exporter of sheep and lamb skins. France has received about three-fourths of the total shipments during recent years. Italy and the United Kingdom have taken most of the remainder.

TABLE 16.--Variety meats: Exports by country of destination, 1957-61[1]

Country of destination	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
United Kingdom	25.1	24.4	40.7	34.0	24.8
Malaya	1.6	1.6	1.9	1.6	2.0
Italy	.9	.2	1.5	.8	.9
Other countries	2.2	2.7	3.0	2.4	2.6
Total	29.8	28.9	47.1	38.8	30.3

[1] Year ending June 30.

TABLE 17.--Cattle hides and calf skins: Exports by country of destination, 1957-61[1]

Country of destination	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Japan	6	9	39	25	30
Germany, West	8	12	14	8	3
Italy	10	10	5	5	2
Sweden	3	2	3	3	2
Netherlands	--	6	7	4	2
United Kingdom	6	6	3	2	1
Other countries	12	6	14	10	4
Total	45	51	85	57	44

[1] Year ending June 30.

TABLE 18.--Sheep and lamb skins: Exports by country of destination, 1957-61[1]

Country	1957	1958	1959	1960	1961
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
France	83	99	103	127	123
Italy	3	5	7	14	17
United Kingdom	13	12	15	15	16
Belgium-Luxembourg	1	2	1	6	7
Yugoslavia	--	1	4	4	3
Germany, West	--	--	1	1	2
Netherlands	--	2	3	2	2
Sweden	1	1	2	1	2
Other countries	4	4	7	2	4
Total	105	126	143	172	176

[1] Year ending June 30.

COMPETITIVE ASPECTS

Australia may continue to export frozen beef and mutton to the United States in large enough quantities to offer competition for U.S. producers. This would mainly affect U.S. beef prices, since the imported boneless mutton is more competitive with beef than with other meats. It would also compete most with prices of lower grade manufacturing beef in the United States, although there is a great deal of competition between manufacturing beef and beef of the higher grades. Exports of higher grade lamb and beef carcasses or cuts are not expected to be large enough to materially affect meat prices in the United States.

A reduction in U.S. beef prices from present levels will tend to reduce imports. As prices fall, U.S. tariffs become higher in relation to the value of meat in a foreign port. Freight and other marketing costs become a much larger proportion of the total landed value. However, prices of boneless beef and mutton could decline substantially until they reach a level where U.S. imports from Australia would cease entirely. Imports tend to even out U.S. meat supplies and prevent extreme price fluctuations, which are characteristic of the livestock industry. It has been argued that increased supplies of lamb, either from imports or from U.S. production, would benefit the industry by enhancing overall demand for lamb. The long-time trend in this demand in the United States appears to be downward. Lamb consumption per person now averages only 4 pounds per year, and lamb accounts for only 2.5 percent of the domestic meat supply. However, individual retail stores have increased the volume of lamb sales significantly by newspaper advertising, and it is apparent that effective promotion would increase demand. Nevertheless, in the last 20 years there has been a strong tendency for U.S. consumers to shift toward beef at the expense of either lamb or pork.

The U.S. producer will remain in a good position to compete with foreign countries for the consumer's meat dollar. U.S. production of beef is expected to rise for a number of years and there will be a fairly substantial increase in marketings of lower grade cow beef over the next 5 years.

Australia will not be in a position to export large amounts of chilled or frozen beef of the higher grades which U.S. consumers prefer for steaks and roasts. While use of frozen meat is growing, consumers still prefer fresh meat and are willing to pay a higher price for it in preference to frozen. Efficient production of low-cost pork and poultry will tend to reduce the need for imported beef. Domestic producers do not have to bear the large marketing costs that Australians have in making shipments to the United States. Marketing costs are ultimately paid by the agricultural producer, and the producer closest to market with the lowest freight rate has a comparative advantage.

On a strictly price basis, the United States could export pork to Australia, but Australia prohibits pork imports to prevent introduction of livestock diseases. Australia has, however, imported substantial quantities of U.S. hog sausage casings.

U.S. wool producers are largely insulated from the effects of large imports of Australian apparel wool by the tariff and the domestic incentive payment program on wool. Were it not for the tariff, domestic wool prices would be nearer to the world level and competition from imports would increase.

The current domestic incentive program maintains average returns to U.S. growers (market prices plus government payment) at 62 cents per pound. During 1960-61, domestic wool prices averaged 43 cents per pound while auction prices in Australia averaged 49 cents per pound. The tariff on apparel wool finer than 44's is 25.5 cents per clean pound, or about 15 cents per pound in-the-grease. It is often maintained that the domestic price is below the duty-added price of foreign wool, but this is primarily due to the better quality and uniformity of the latter.

Dollars earned from exports of meats and wool from Australia eventually return to the United States through mutually advantageous trade in other products.

U.S. producers also face indirect competition from Australian producers in maintaining and expanding export markets for their surplus production. Last year the United States exported 45 percent of its production of tallow and greases, 27 percent of its production of cattle hides, and 6 percent of its variety meats. Australia has increased exports of tallow and greases to Japan, the Republic of South Africa, and the Federation of Rhodesia and Nyasaland at the expense of U.S. shipments. Its increased shipments of cattle hides are mainly to important U.S. export markets.

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